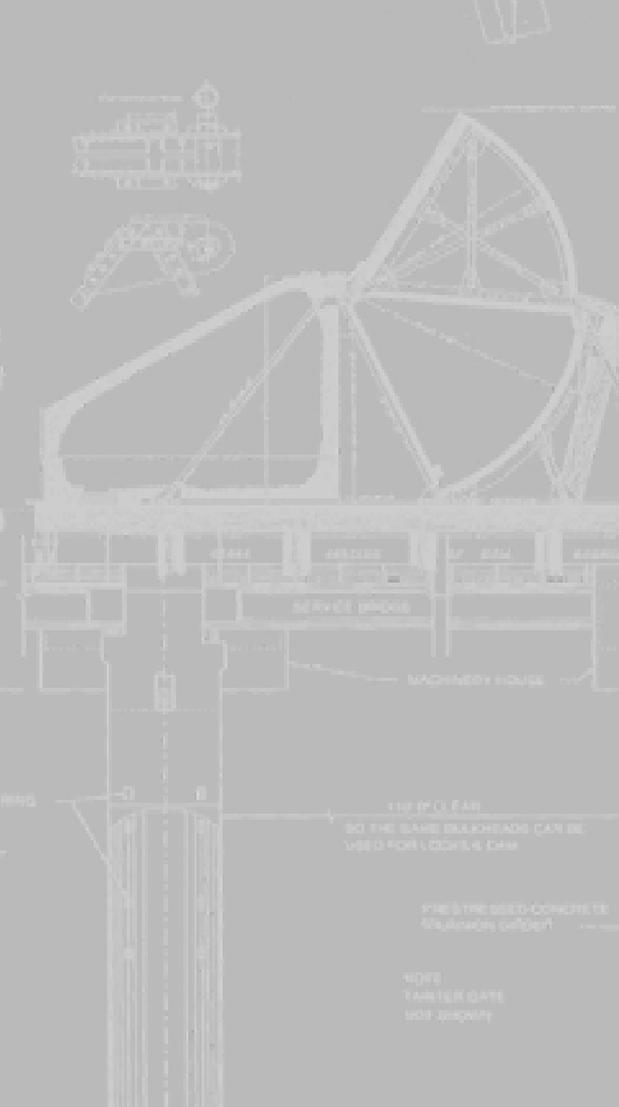


SAD MAINTENANCE UPDATE SOUTHEASTERN FEDERAL POWER ALLIANCE

Matthew Dunn, P.E.
Project Manager
U.S. Army Corps of Engineers
South Atlantic Division
Hydropower Technical Services Center
APRIL-2020



US Army Corps
of Engineers®



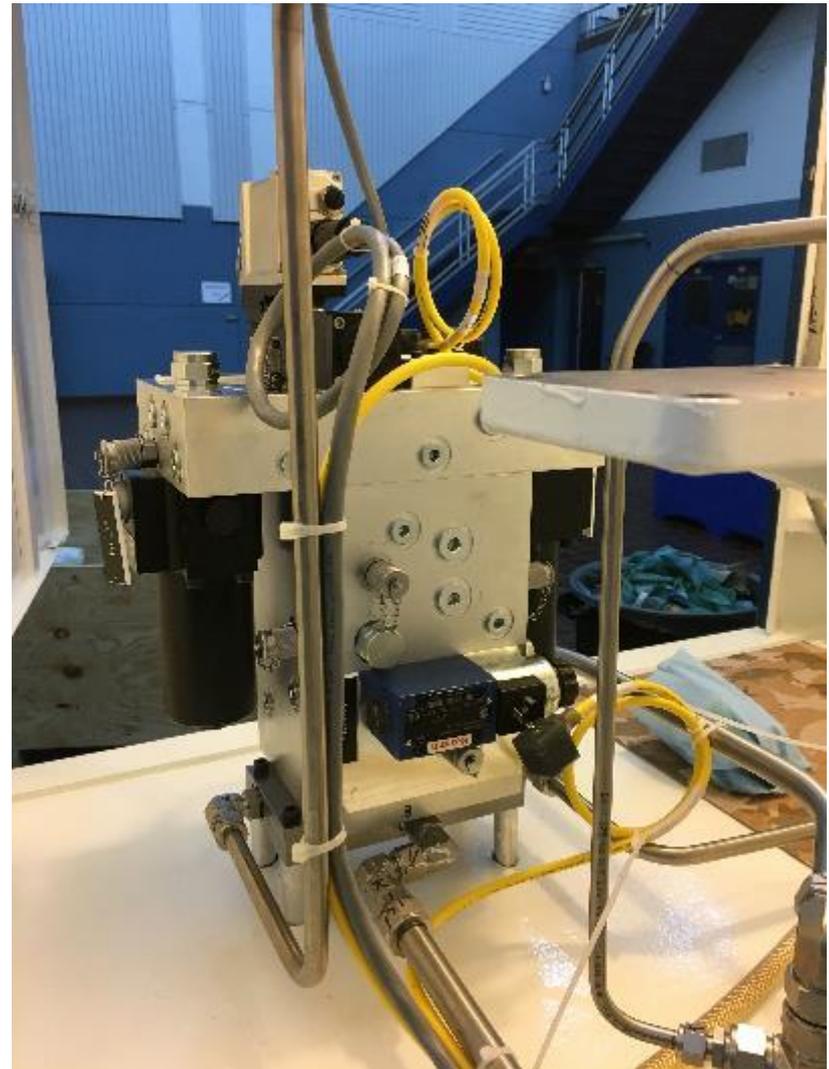


MAJOR MAINTENANCE PROJECTS



Projects expected or completed in FY20:

- Allatoona Governor Replacement
- Jones Bluff Draft Tube Crane Replacement
- Jim Woodruff Intake Crane Rehab
- Jim Woodruff Roof Replacement
- Jones Bluff 13.8kV Switchgear Install
- Philpott Draft Tube Gate Supply
- Philpott Intake Gate Refurbishment





PHILPOTT TURBINE & GENERATOR UPGRADE



Scope: \$25.3M in customer funds to upgrade turbines, rewind generators and replace associated equipment.

Current Status:

- Existing rating: 7.5MVA
- Expected uprate rating: 9.3MVA
- Intake Gates Refurbishment
- Intake Gates Refurbishment
 - First Gate Complete
 - TVA to be completed Jun-2020.
- Draft Tube Bulkheads Replaced.

Next Steps:

- Advertise Turbine Generator contract.



Milestone	Duration	Scheduled
Advertise Solicitation:		20-May-20
Close Solicitation:	160	20-Oct-20
Award:	45	20-Feb-21
Contractor Design:	270	17-Nov-21
Manufacture:	365	17-Nov-22
Installation	365	17-Nov-23
Installation	365	17-Nov-24



RICHARD B RUSSELL UNIT 5 REPAIR



Scope: Project to Assess and Repair Unit 5.
Sub-agreement for \$1.6M.

Current status:

- Excessive vibration
- Stator frame translation.
- Unit remains out of service.
- SATOC Generator Repair Contract in place.
- Task Order for evaluation is written.
- Customer funds approved.

Next Steps:

- Obtain Customer Funds
- Advertise and award task order.
- Begin evaluation and testing.
- Repair task order



Milestone	Duration	Scheduled
Advertise Solicitation:		24-Apr-20
Close Solicitation:	14	08-May-20
Award:	30	07-Jun-20
Contractor Eval:	60	06-Aug-20
Award Rep T.O:	90	04-Nov-20
Complete Repair:	90	02-Feb-21



HARTWELL UNITS 3 & 4 REWIND



Scope: Project to Rewind Units 3 & 4.
Increasing sub-agreement by \$18.7M for the rewind work.

Current status:

- Repair efforts were abandoned.
- Rewind Plans and Specs completed.
- Advertised 11-Feb-2020.

Next Steps:

- Evaluate proposals.
- Award Contract.
- Begin work.



Milestone	Duration	Scheduled
Advertise Solicitation:		11-Feb-20
Close Solicitation:	120	10-Jun-20
Award:	45	25-Jul-20
Contractor Design:	180	21-Jan-21
Manufacture:	90	21-Apr-21
Installation:	120	19-Aug-21
Installation:	120	17-Dec-21



SAD CONTROLS INFRASTRUCTURE UPDATES



Scope: Implement next generation Unit and Supervisory Controls throughout SAD.

Current status:

- Customer Funding Requests:
 - Supervisory and Unit Controls for GA-AL-SC -Approved.
 - Supervisory and Unit Control Design for Kerr-Philpott -Approved.
 - Supervisory and Control Design for Jim Woodruff –Approved.
- WFG Supervisory Controls Design underway.
- Implementation schedule revised.
- Schedule optimized to reduce outages during peak seasons.

Next Steps:

- Acquire Unit Control Supply & Install Funds.
- Finalize long term design and install schedule.
- Complete Designs & Award Task Order.
- Procure and Install Equipment.





HTSC SIGNIFICANT ACTIVITIES



Forced Outage Responses:

- SAS RBR U5 Vibrations
 - Jan-2020
- SAS RBR U6 Head Gate
 - Feb-2020

Proactive Task Order Contracts:

- Governor Repair
 - FY20 Award
- Exciter Repair
 - FY20 Award
- Turbine Repair
 - FY21 Award



HTSC Workload	
Planning	76
Design	26
Pre-Solicitation	13
Advertise	1
Execution	24
Closeout	5



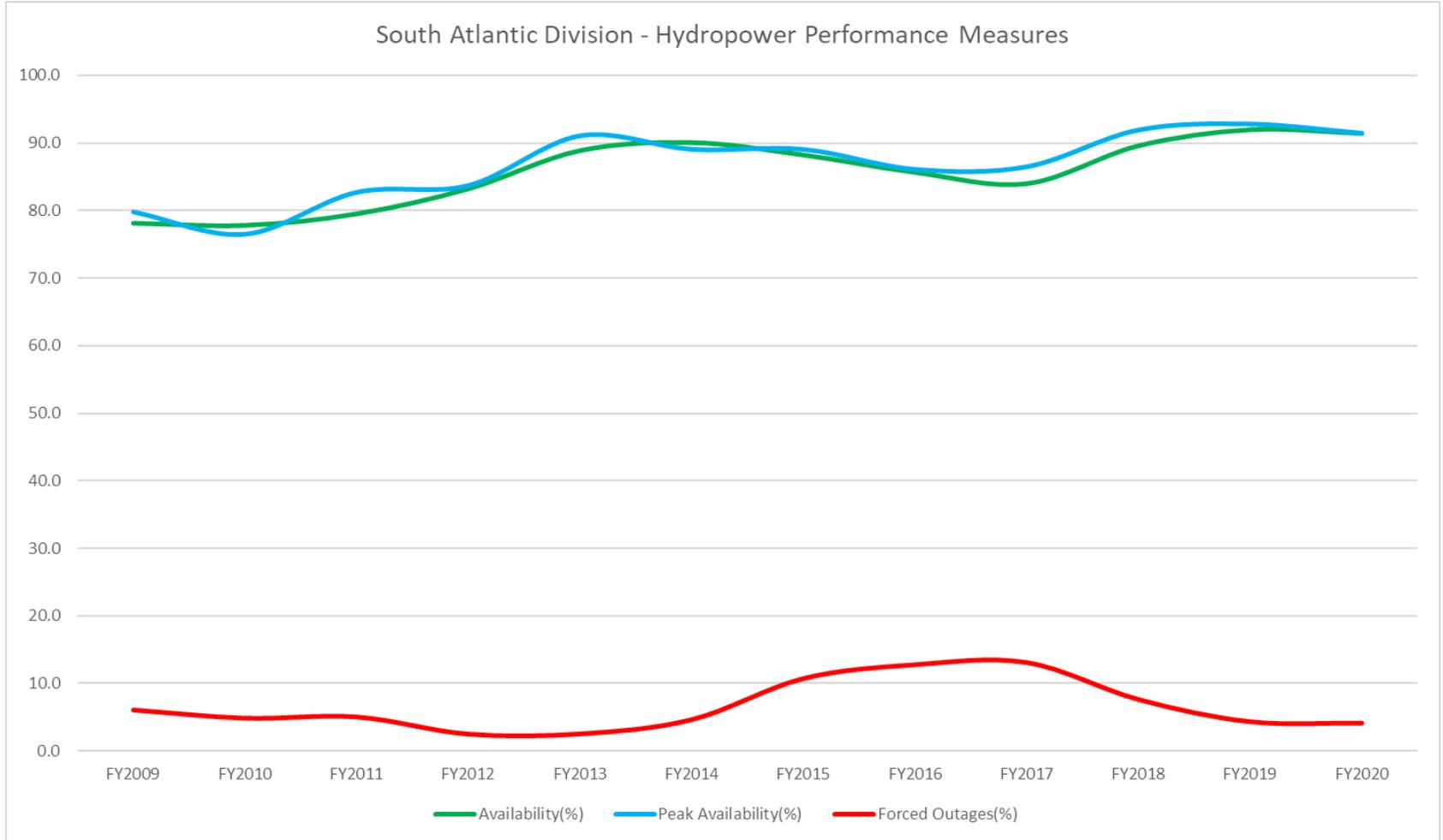
QUESTIONS



HYDROPOWER PERFORMANCE MEASURES



South Atlantic Division - Hydropower Performance Measures



Availability

less than 90%
90%-94.99%
95% or greater

Forced Outage Rate

greater than 4%
2.0-4.0%
less than 2%